



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,904	12/26/2001	Yong Ik Bang	8733.525.00	7612

30827 7590 09/25/2003

MCKENNA LONG & ALDRIDGE LLP  
1900 K STREET, NW  
WASHINGTON, DC 20006

EXAMINER

RUDE, TIMOTHY L

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/025,904

Applicant(s)

BANG ET AL.

Examiner

Timothy L Rude

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species A, first embodiment, Figures 3 and 4, drawn to a liquid crystal display panel comprising: the pixel regions in a peripheral portion of the matrix arrangement have an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement due to the width of the first and last data lines being wider than the other data lines (all gate lines are of equal width).

Species B, second embodiment, Figures 5 and 6, drawn to a liquid crystal display panel comprising: the pixel regions in a peripheral portion of the matrix arrangement have an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement due to the width of the first gate line being wider than the other gate lines (all the data lines are of equal width).

Species C, third embodiment, Figure 7, drawn to a liquid crystal display panel comprising: the pixel regions in a peripheral portion of the matrix arrangement have an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement due to the width of the first and last data lines and the first gate line being wider than the other data and gate lines respectively.

Species D, fourth embodiment, Figures 8 and 9, claim 4, drawn to a liquid crystal display panel comprising: the pixel regions in a peripheral portion of the matrix arrangement have an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement due to the width of the black matrix on the second substrate is wider over the first and last data lines and the first gate line than it is over the other data and gate lines respectively (the first gate line being wider than the other gate lines per Figure 8, the data line widths are the same per Figure 9, and no light-shielding areas per Figure 9).

Species E, fifth embodiment, Figures 10 and 11, claims 5, and 13-16, drawn to a liquid crystal display panel comprising: the pixel regions in a peripheral portion of the matrix arrangement have an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement due to light-shielding areas added to the first substrate in the pixels in the peripheral portion (gate line and data line widths all the same per Figure 10).

Species F, other embodiment, claims 17-20, drawn to a liquid crystal display panel comprising: the pixel regions in a peripheral portion of the matrix arrangement have an aperture ratio lower than that of the pixel regions in other portions of the matrix arrangement due to the width of the black matrix on the second substrate is wider over the first and last data lines and the first gate line than it is over the other data and gate lines respectively (the width of the first and last data lines and the first gate line being wider than the other data and gate lines respectively, and no light-shielding areas).

Currently, claims 1, 3, 6, 7, 9, and 10 are generic to Species A, claims 1, 2, 7, 8, 11, and 12 are generic to Species B, claims 1-3, and 7-10 are generic to Species C, claims 1, 2, 7, 8, 11, and 12 are generic to Species D, claims 1 and 6 are generic to Species E, claims 1-3, 4, and 6-12 are generic to Species F.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, A-F, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (703) 305-0418. The examiner can normally be reached on Monday through Thursday.

Application/Control Number: 10/025,904  
Art Unit: 2871


Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (703) 305-3492. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

Timothy L Rude  
Examiner  
Art Unit 2871

TLR

  
**JAMES DUDEK**  
**PRIMARY EXAMINER**